



# **Advanced Research Projects Agency – Energy *Overview***

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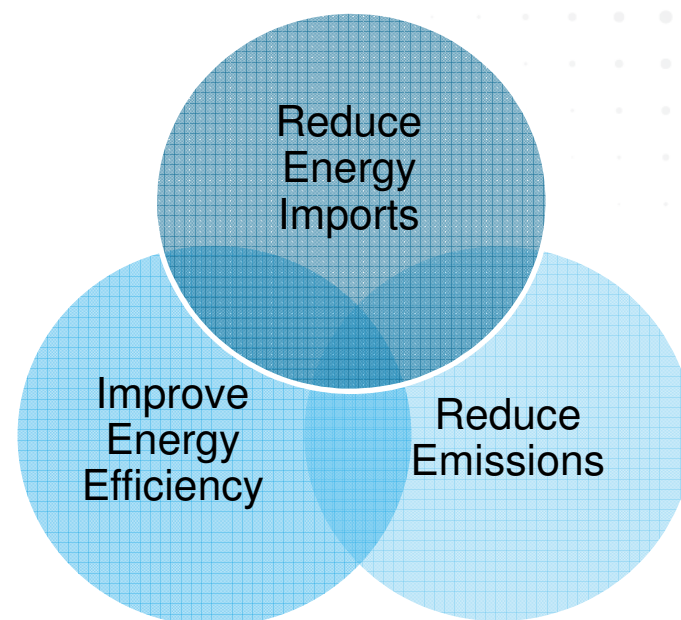
<http://www.arpa-e.energy.gov/>

# ARPA-E Authorizing Legislation\*

**Mission:** To overcome long-term and high-risk technological barriers in the development of energy technologies

**Goals: Ensure America's**

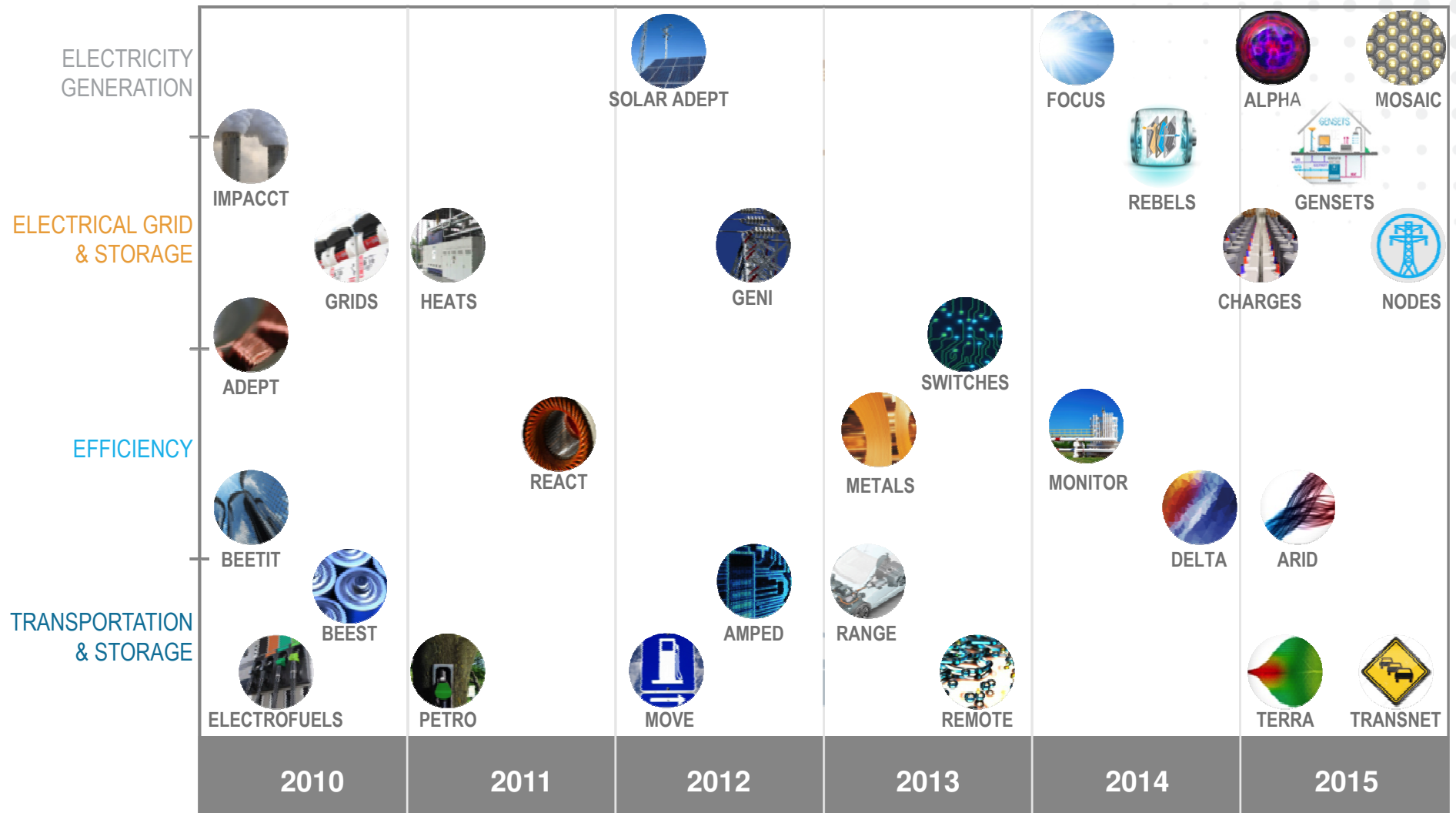
- ▶ Economic Security
- ▶ Energy Security
- ▶ Technological Lead in Advanced Energy Technologies



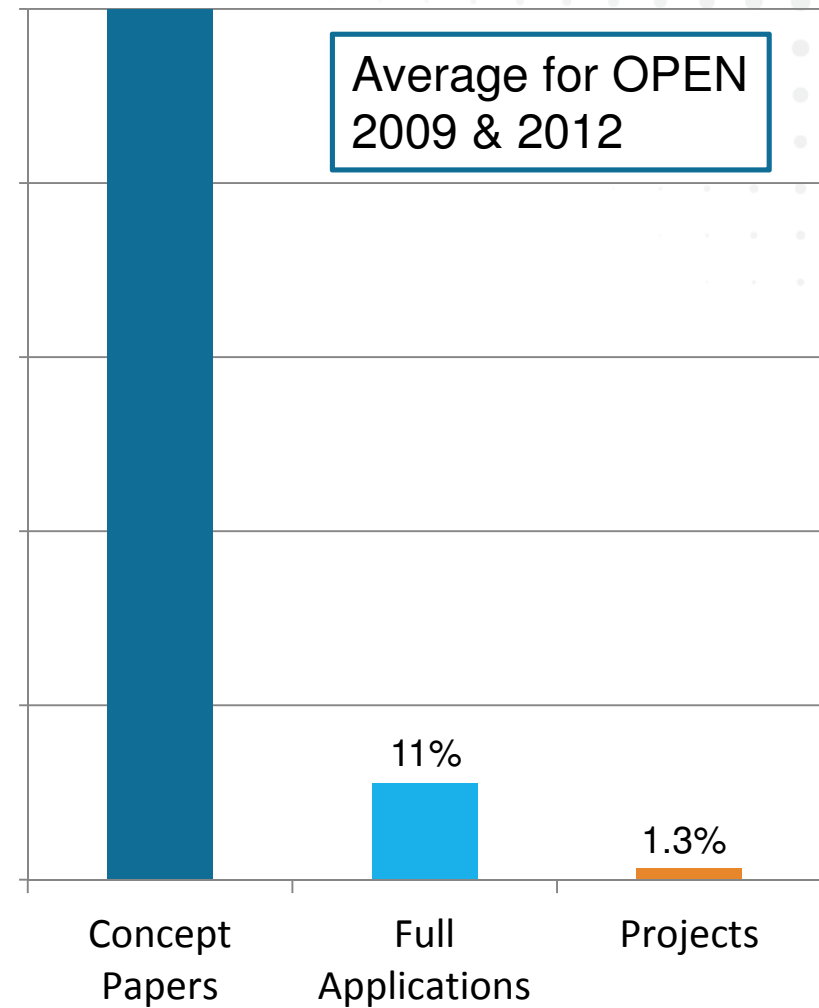
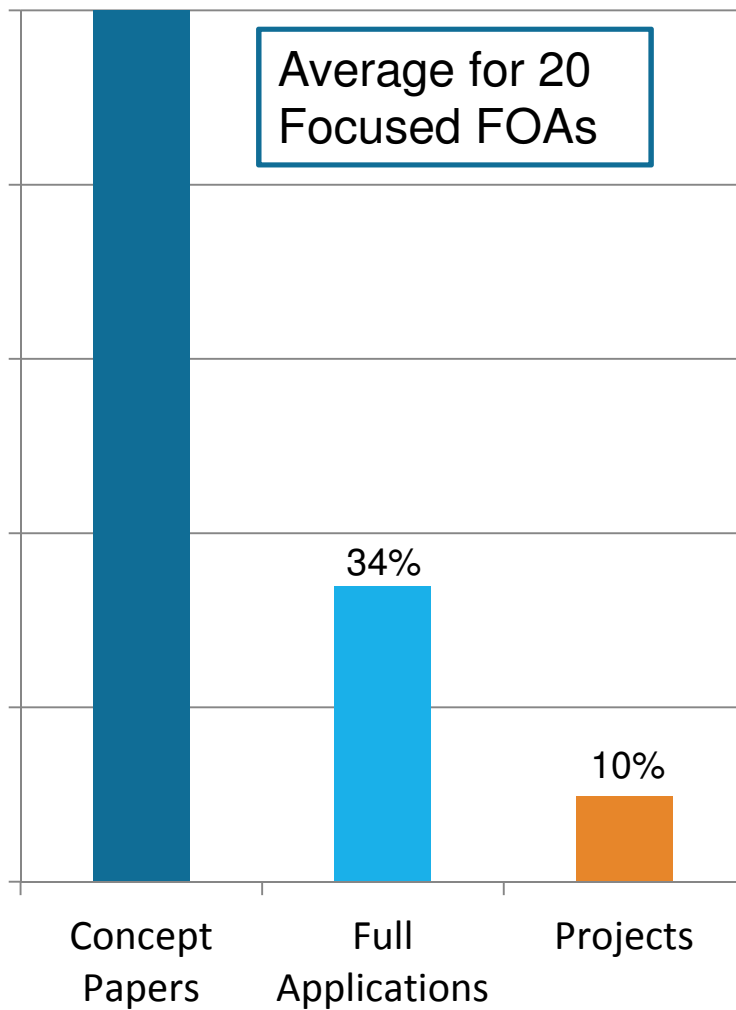
**Means:**

- ▶ Identify and promote revolutionary advances in fundamental and applied sciences
- ▶ Translate scientific discoveries and cutting-edge inventions into technological innovations
- ▶ Accelerate transformational technological advances in areas that industry by itself is not likely to undertake because of technical and financial uncertainty

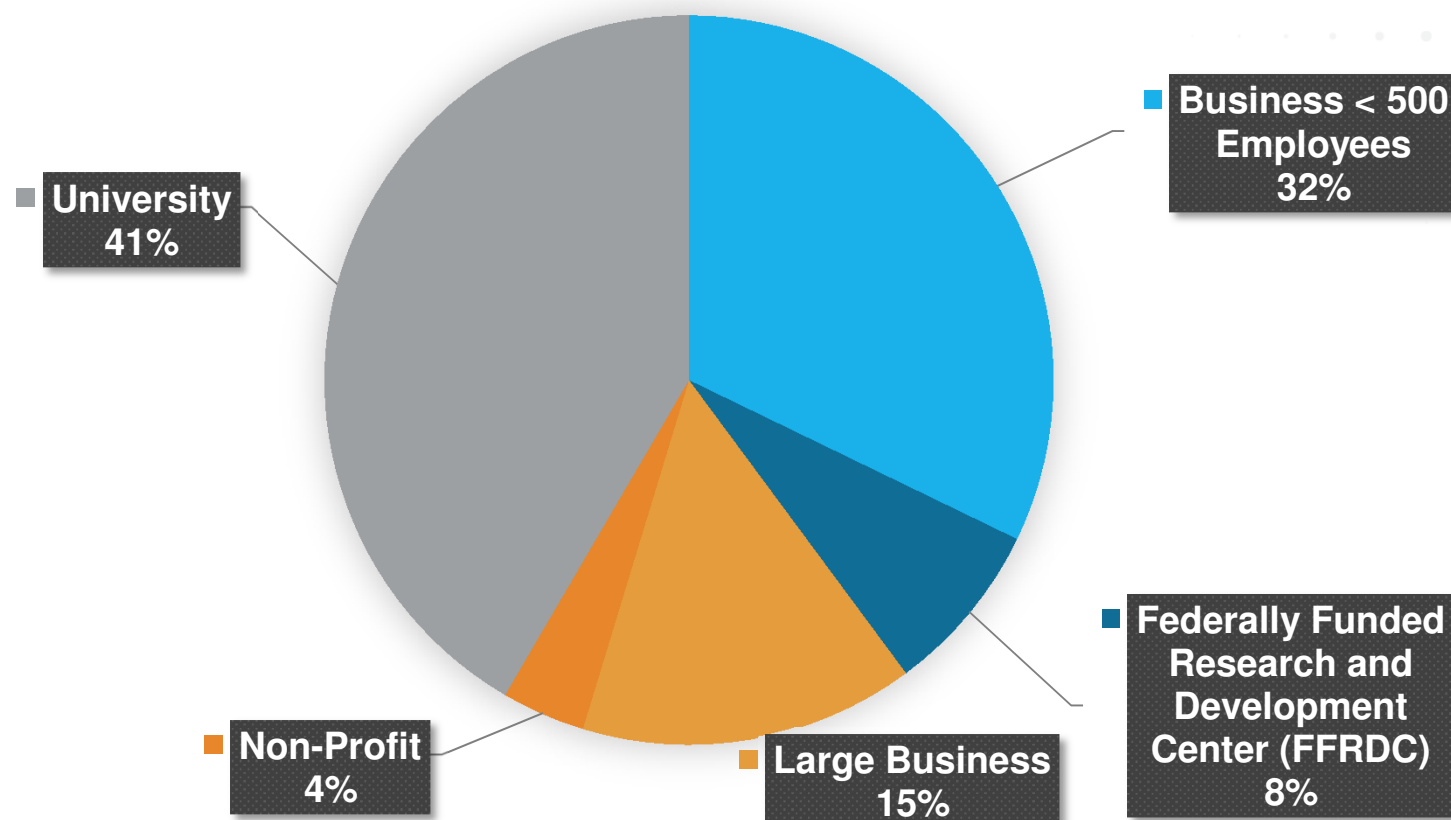
# Focused Program Portfolio



# FOA Success Rates



# ARPA-E Project Portfolio by Lead Organization



ARPA-E supports multi-institutional teams with substantial involvement from the private sector:

74% of projects involve more than one institution

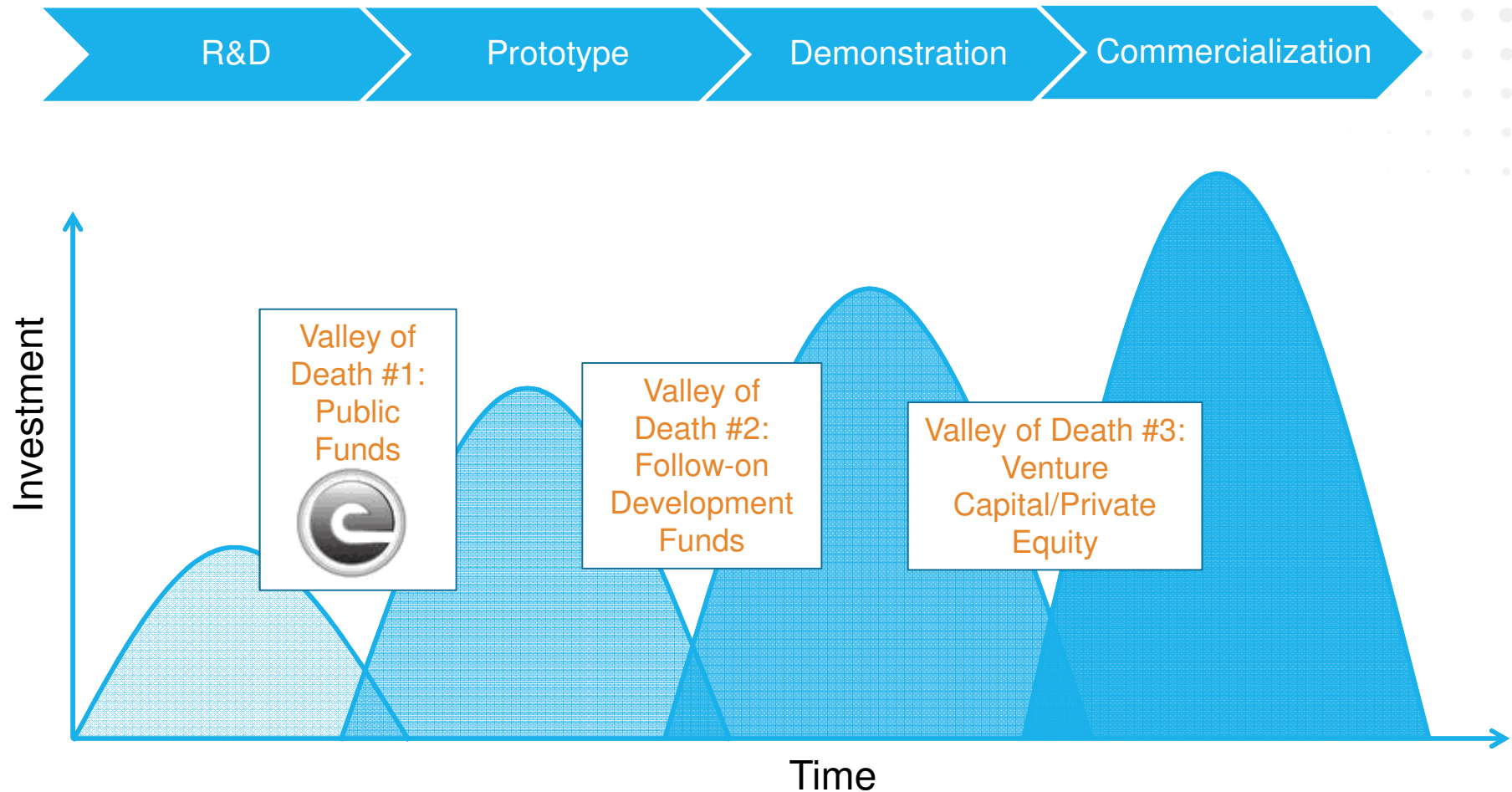
79% of projects include the private sector, as leads or partners



If it works...

***will it matter?***

# Transitions Toward Market Adoption



# Program Directors and T2M Advisors

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*Program Directors and T2M advisors serve 3-year terms*

## ROLES & RESPONSIBILITIES - PD

- ▶ Perform technical deep dive soliciting input from multiple stakeholders
- ▶ Present & defend program concept in climate of constructive criticism
- ▶ Actively manage portfolio projects from merit reviews through project completion
- ▶ Develop milestones and work “hands-on” with awardees in value delivery
- ▶ Represent ARPA-E as a thought leader in the program area

## ROLES & RESPONSIBILITIES – T2M

- ▶ **Manage** the Commercialization progress of project technologies
  - Manage project teams’ T2M efforts through T2M Plans and jointly developed milestones
- ▶ **Advise:** support project teams with skills and knowledge to align technology with market needs
  - IP and competitor management
  - Value Chain and Market analysis
  - Product hypothesis
  - Economic analysis
  - Partner discovery and engagement

# ARPA-E Summit – Partner Discovery and Engagement

**Technology Showcase:** ARPA-E-funded project teams as well as a selective group of researchers and technologists from other companies and organizations.

## **Formal Partner Engagement:**

Corporate Acceleration Program

Networking Receptions

Industry trade association sponsored

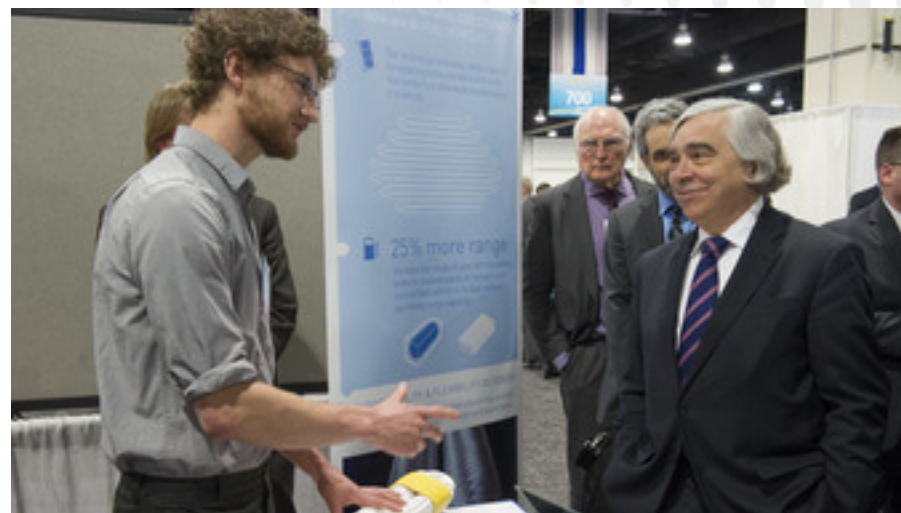
Government

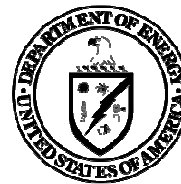
Regional development groups

## **Outreach:**

Student Program

Women in Energy Networking  
Breakfast





U.S. DEPARTMENT OF  
**ENERGY**

Sign up for our newsletter at

[www.arpa-e.energy.gov](http://www.arpa-e.energy.gov)

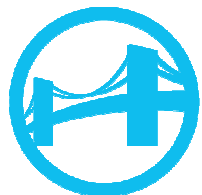
Join us at our 2016 Summit

February 29 – March 2, 2016

Gaylord National Convention Center  
just outside Washington, DC.

# ARPA-E Impact

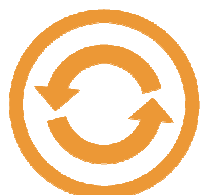
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**INNOVATION OPPORTUNITIES**



**PATH TO COMMERCIALIZATION**



**EVOLVING PORTFOLIO**



**OPTIONS FOR THE FUTURE**

# Measurable Metrics of Path Toward Market

Since 2009 ARPA-E has invested approximately \$1.1 billion across more than 400 projects through 23 focused programs and two open funding solicitations.

34 ARPA-E projects have attracted more than \$850 million in private-sector follow-on funding

